

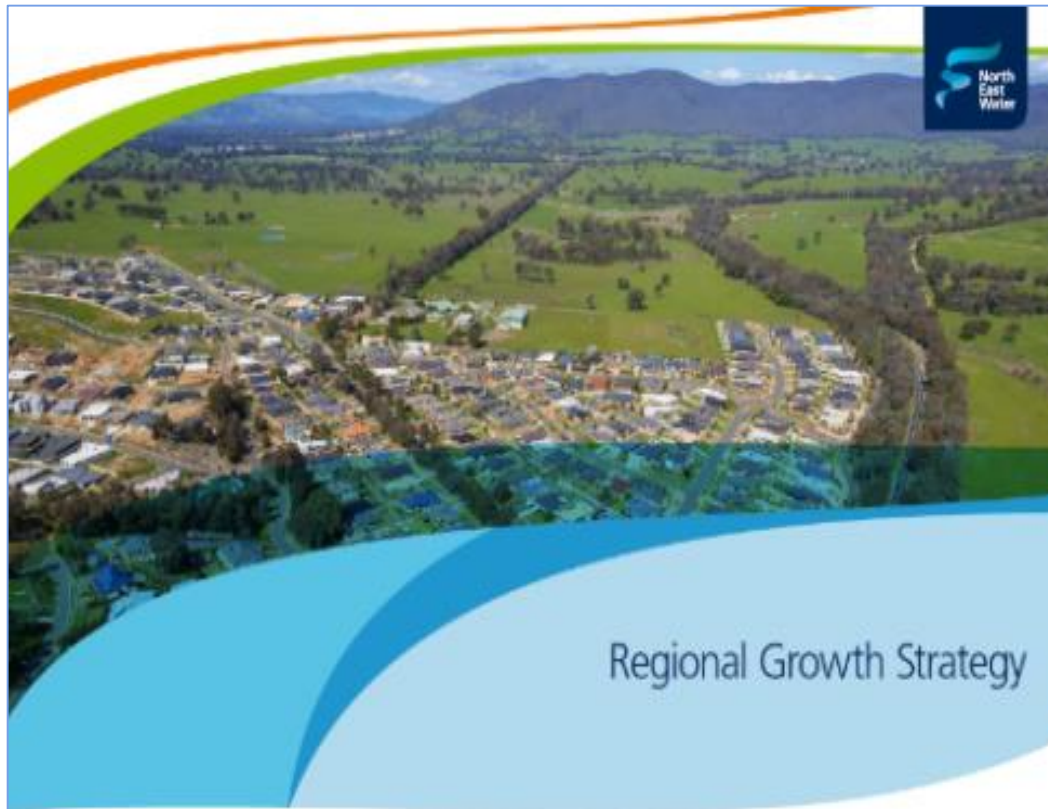
Innovation in Water Infrastructure Planning, or

What have the Romans ever done for us?

Dr Andrew Manning, BA (Soc Sci) (Hons), MPPM, PhD
Former Senior Manager Infrastructure Planning & Development
SEGRA Conference, Cobram-Barooga
Concurrent Session 10, Wednesday 21 August 2019

Planning & Infrastructure - Context

Outline of today's presentation



Purpose

Outcome

Methodology

Findings

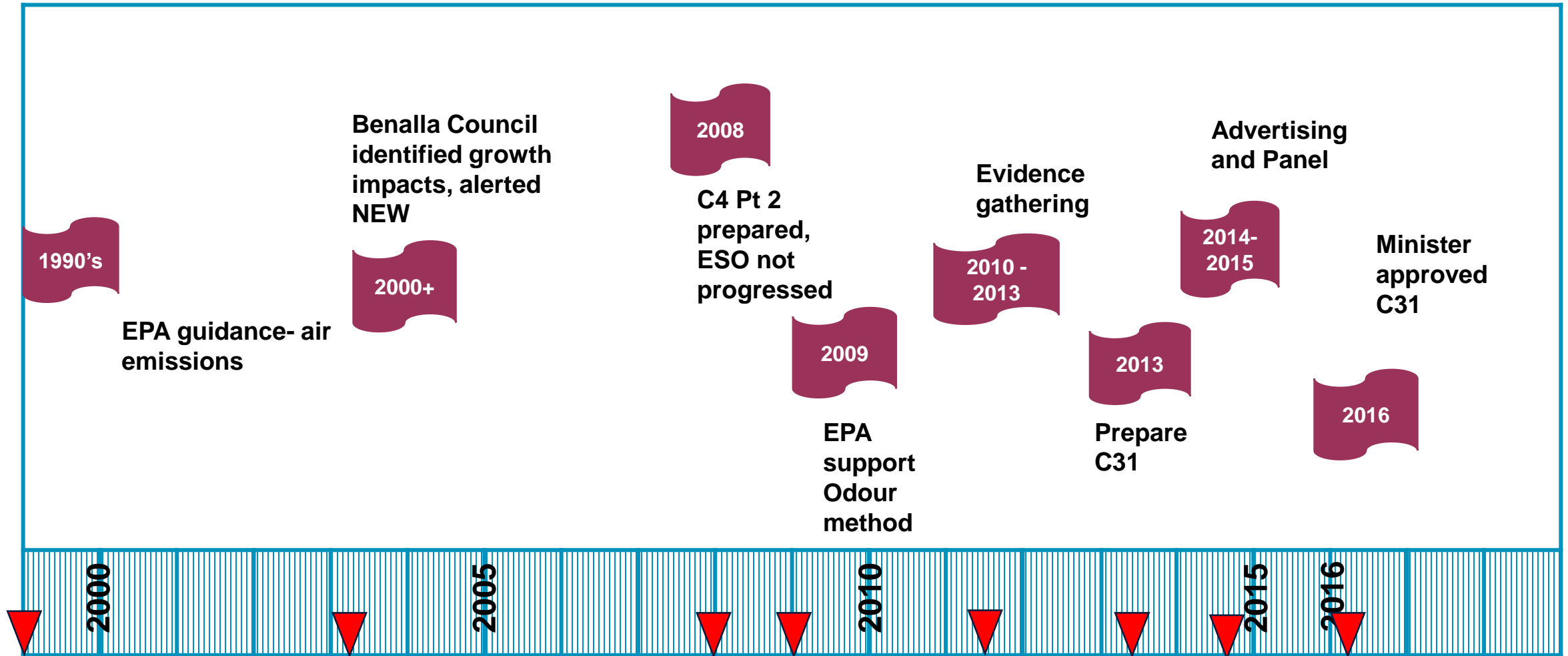
Implementation

Infrastructure and the Benalla Planning Scheme Amendment C31

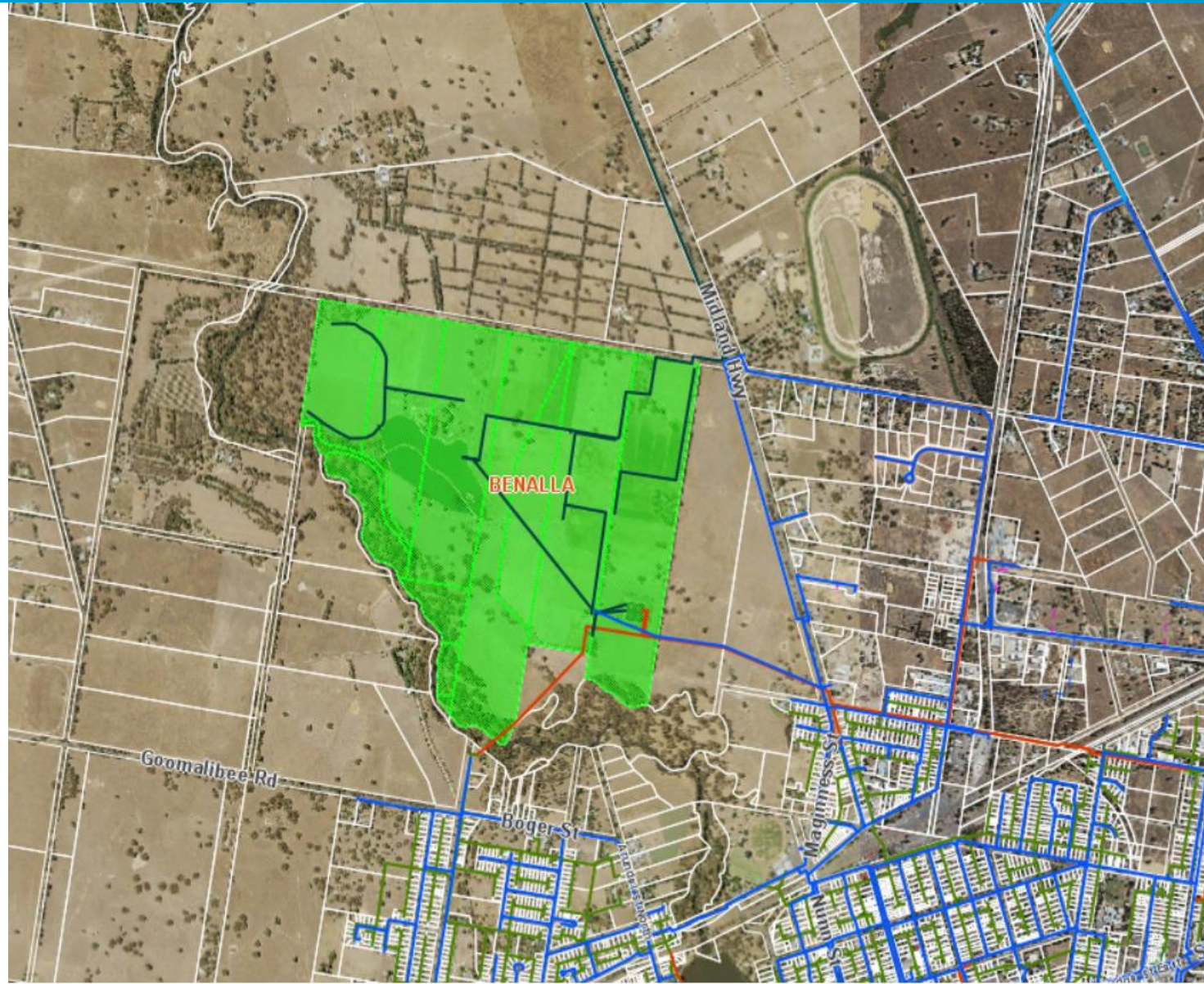
What is all this about?

- The development of an innovative odour modeling methodology where a wastewater treatment facility is in proximity to incompatible development and sensitive land uses
- The implementation of a site specific planning control in a local planning scheme to protect critical community infrastructure, and
- The setting of planning precedent for infrastructure protection that local and state governments and water corporations can benefit from

Timeline – Key Events



Site Location – Benalla Wastewater Treatment Plant

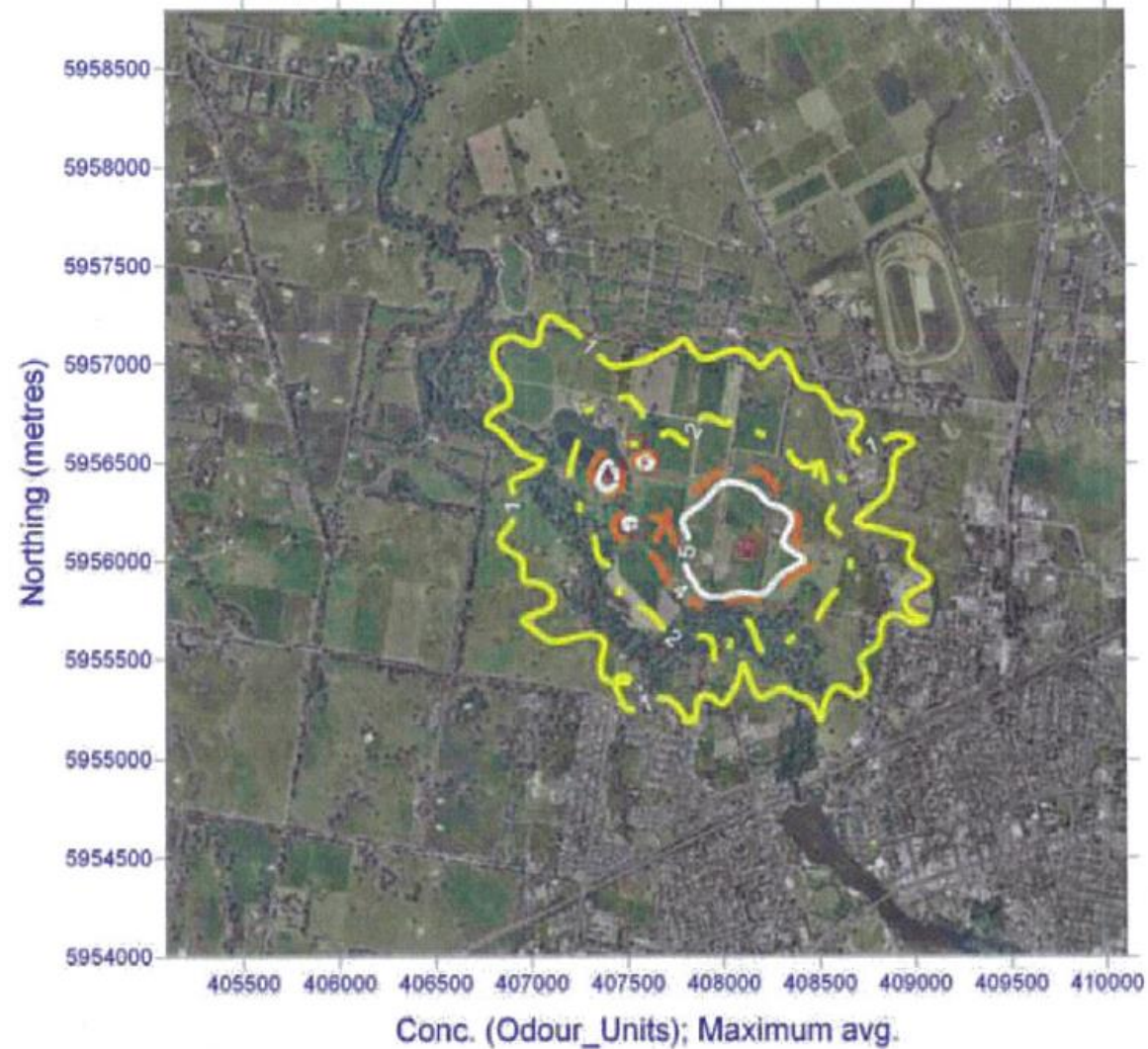


Project Methodology – Key Milestones

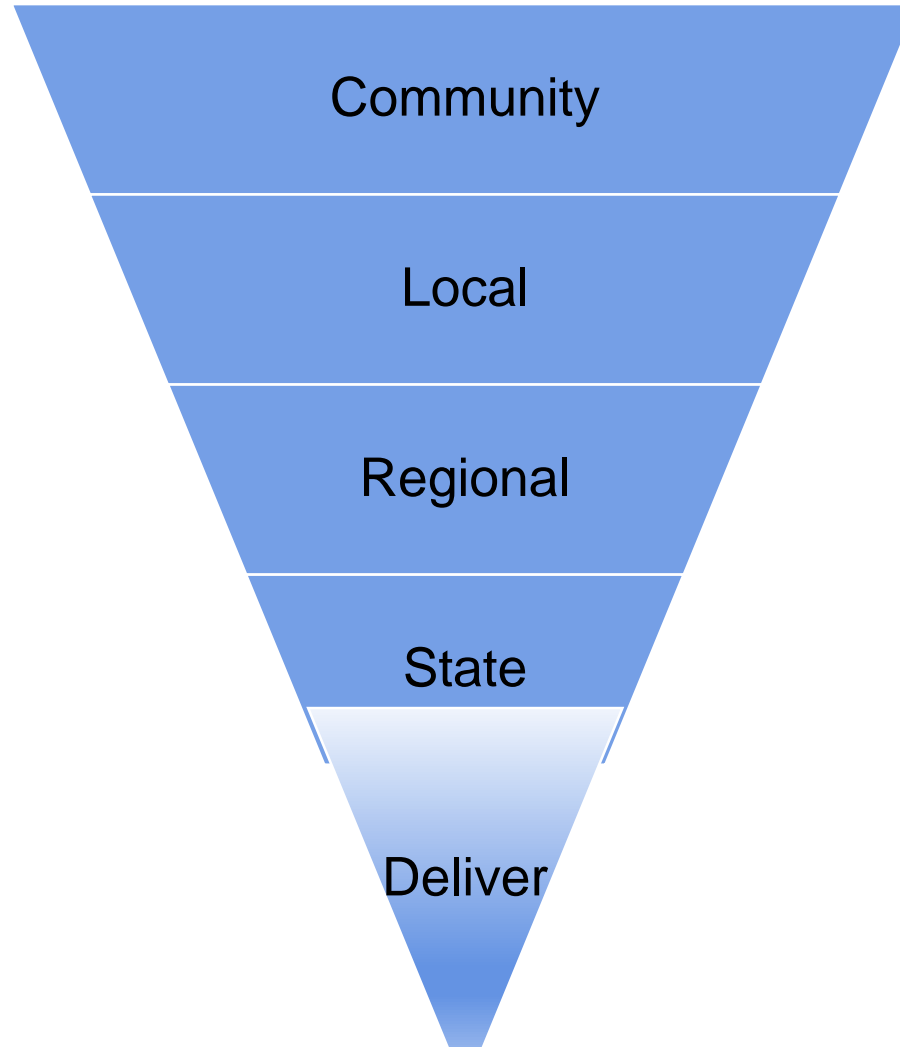
- ✓ October 2008 – Amendment C4 Part 2 Panel Hearing
- ✓ Early 2009 – engaged Dr Ian Wallis.
- ✓ July 2009 – EPA endorsed methodology
- ✓ February 2010 – commence odour sampling
- ✓ June 2010 – risk workshop
- ✓ July 2010 – EPA support ESO
- ✓ 2011 – CEE modelling
- ✓ March 2012 – buffer distances determined
- ✓ 2012 – community consultation
- ✓ 2013 – Prepare Amendment C31
- ✓ 2014 – Advertised November 2014 by Council
- ✓ 2015 – Panel
- ✓ June 2015 – Panel report.
- ✓ March 2016 – Minister approved.

Findings – Extent of buffer

Benalla: Event 4 - Short Power Failure At Plant (14,500 OU.m3/s)



The Engagement Landscape



Key People

Dr Ian Wallis, CEE

Nilesh Singh, Manager Planning Benalla Council

Julie Brooks, Planning Coordinator NEW

Involved throughout entire process

Asset Protection – Learning

- ❑ Culmination of 8 years work
- ❑ Once adopted, ESO does not need to be updated outside of cyclical reviews of planning scheme by Council
- ❑ Promoted compatible development and uses
- ❑ Reverse Amenity
- ❑ Provides an alert to a prospective developer and council that an issue may be present

Broader Use of the ESO in Victoria

1. Air Emissions Buffer - Maryborough Wastewater Plant, Central Goldfields Planning Scheme, ESO 2 VC37
2. Eastern Treatment Plant Buffer Area, Greater Dandenong Planning Scheme, ESO 3 VC37
3. Shepparton Wastewater Treatment Facility, Greater Shepparton Planning Scheme, ESO2 C115
4. Mooroopna Wastewater Treatment Facility, Greater Shepparton Planning Scheme, ESO3 C115
5. Tatura Wastewater Treatment Facility, Greater Shepparton Planning Scheme, ESO4 C115
6. Murchison Wastewater Treatment Facility, Greater Shepparton Planning Scheme, ESO5 C115
7. Wastewater Treatment Facilities, Macedon Ranges Planning Scheme, ESO7 C99
8. Mildura Waste Water Treatment Plant and Reuse Centre, Mildura Planning Scheme, ESO2 C44
9. Kilmore Wastewater Management Facility Buffer Area, Mitchell Planning Scheme, ESO5 C79 and Panel
10. Stawell Wastewater Treatment Plant Buffer Area, Northern Grampians Planning Scheme, ESO 3 C16
11. Sewage Treatment Plant and Environs, South Gippsland Planning Scheme, ESO 4 VC37.
12. Euroa Wastewater Management Facility Buffer Area, Strathbogie Planning Scheme, ESO2 C32

Implementation

- Next Steps –
 - > Implementation framed in Regional Growth Strategy
 - Prepare a Strategic Land Use Plan
 - Further ESOs in Local Planning Schemes
 - State-wide DELWP review of buffers

I hope you found our work interesting,
please read my paper in the proceedings &
I welcome any questions you may have 😊

Contact Details

Dr Andrew Manning
Former Senior Manager Infrastructure Planning & Development
North East Water

Currently, Lecturer, School of Environmental Sciences
Adjunct Research Fellow
Institute for Land Water and Society,
Charles Sturt University

E: amanning@csu.edu.au

M: 0458 939 650